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ABSTRACT

This study examines the role of dialogue and collaborative reflection in guiding teachers' identification of issues and contextual barriers in their practice. It analyzes teachers' social interactions and academic self-efficacy during the dialogic process and evaluates the quality of inquiry that teachers proposed to change their practice. Participants were 21 experienced teachers from 3 international schools who were taking a 2-week course, "Introduction to Research," that taught skills necessary to become consumers of research. The course provided an opportunity for discussion of fundamental questions related to knowledge, knowing, and learning. Dialogue and reflective processes were the pathways into class assignments. A writing task emphasized critical analytic skills. A research task involved interactive processes around issues related to past experiences, subject matter, educational and social goals, teachers' and pupils' personalities, interests and talents, and resources available. The research task had three phases: choosing a topic; creative design and problem solving; and presenting the work to the group for critique. Data for the analysis came from teachers' journals, anecdotal records, interviews, group dialogue, and class products. Results showed that reflection, dialogue, and inquiry facilitated teachers' collaborative efforts toward identifying and resolving common challenges. Teachers reported concerns regarding curriculum design, teaching and learning, community relations, and assessment. Teachers reported negative academic self-efficacy. Females and elementary teachers were more apt to work in teams. About 20 percent of the research plans were rated excellent. (Contains 27 references.) (Author/SM)

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Running Head: COLLABORATIVE REFLECTION

Collaborative Reflection, Dialogue, and Inquiry: Empowering Experienced Teachers to Cultivate Dispositions and Abilities that Transform Practice

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Abstract

This study examines first, the role of reflection in guiding teachers' identification of issues/barriers in their practice; second, it analyzes teachers' social interactions and their academic self-efficacy during the dialogic process; and third, it evaluates the quality of their proposed inquiry. Twenty-one experienced teachers from three international schools participated. Data included teachers' journals, anecdotal records, interviews and class products. Analyses indicated that (a) teachers' concerns related to curriculum design, teaching and learning, community relations and assessment; (b) teachers reported negative academic self efficacy; (c) female participants at the elementary level were more apt to work in teams; and (d) 20 percent of the research plans were rated as "Excellent". Continuing research in interpersonal reasoning is recommended.

In today's schools, more demands are being made on teachers to assume responsibility for improving their practice, advancing life-long learning and effecting school change. Nationally and internationally, school-university partnerships have worked to explore ways to support the cultivation of relevant dispositions and abilities in teachers (The Holmes Group, 1990). To date, emphasis has been primarily on teacher preparation programs. Nevertheless, educators of educators understand that the potential for all teachers to participate in the professional dialogue and action needed to attain those goals rests also in experienced teachers' ability to take part in effective and integrated professional development activities. To sustain such experiences, faculty and teachers must work together through study, reflection and inquiry to articulate the challenges/dilemmas and achievements in their professional practice and context, to explore their identity and to cultivate dispositions and abilities needed for transformational teaching and learning.

This descriptive study has a three-fold emphasis: (1) it examines the role of dialogue and collaborative reflection in guiding teachers' identification of common issues and contextual barriers in their practice; (2) it analyzes the social interactions among teachers and their perception of academic self-efficacy during the dialogic and inquiry process; and (3) it evaluates the quality of the inquiry proposed by teachers to change their practice. The questions guiding the investigation were: (1) What are the issues, challenges and constraints of teaching that emerge out of the collaborative dialogue and reflection of experienced teachers in an international setting? (2) What are the salient characteristics of teachers' social interaction and their perceptions of their

academic self efficacy during the dialogic and inquiry process? (3) What is the qualitative assessment of teachers' planned inquiry?

Theoretical Framework

Ann Lieberman, leading teacher educator and scholar presented a view of scholarly activity and achievement as a synthesis of two meanings: "first, *scholarship* -- a quality of knowledge and learning which is systematic, attempting accuracy, a critical ability and a thoroughness; and second, *activity* -- requiring action and/or producing real effects" (Lieberman, 1992, p. 5). She indicates that scholarship and activity are reflected in three major areas: first, the study of all elements of school culture to better understand and describe the improvement of practice; second, in creating new frames and strategies for thinking about, understanding and acting upon this new knowledge; and third, in building collaborative structures and relationships between schools and universities that deal with specific or general areas of content and pedagogy and are aimed at the transformation of research and practice. Teacher professional development programs based on this conceptual frame can provide opportunities for experienced teachers to become more self-directed and knowledgeable learners and teachers. However, other literature on teacher development suggest that other constructs uncover different dimensions in the design of professional development programs.

Reflection -- the reflective process and practice -- is at the core of self awareness and self-directed learning. John Dewey (1944) first introduced the concept of reflective thinking as the "active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it" (Dewey, 1944, p.146). Eby and Kujawa (1994), correlating the

characteristics of the reflective thinker and the reflective teacher, indicated that the reflective teacher is one who (1) actively engages in an energetic search for information and solutions to problems in the classroom; (2) is committed to thinking through difficulties in depth; (3) cares deeply about ways to improve their classroom performance; (4) maintains a healthy skepticism about educational theories and practices; and (5) uses evidence and criteria in making a judgment. These actions are those that characterize the teacher researcher. The challenge in professional development is to provide teachers with the experiences that can bring them to a comprehensive understanding of the concept and the process of reflection. The research literature offers many models (Smyth, 1992; Van Manen, 1977; Goodman, 1986; Schon, 1983, & 1987).

However, across the many interpretations of reflection, educators have acknowledged that for teachers to translate their thoughts into reflective action, certain attitudes and dispositions, for example, open-mindedness, responsibility and caring, are needed. Schon (1987) defined the reflective practitioner as one who engages in "reflection-in-action" -- an interior observation and criticism of personal action. Schon's notion of reflection-in-action and its potential to improve practice provide one argument for professional dialogue and inquiry.

While dialogue facilitates the interrelationships among curriculum, teaching and context, reflective inquiry process examines rules and assumptions about teaching that shape and/or constrain one's own practice (Grimmett, 1988). It allows practitioners to delve into the problem areas and look at the ramifications of context, knowledge construction, and alternate perspectives in support of decision making. McLaren (1989) argues that these skills are socially constructed and in turn supports the power of informed participation. Collaborative study, reflection-in-action

and inquiry provide the opportunity for effective work. Authentic collaboration, well orchestrated in the national and international schools -- teacher to teacher, teacher to faculty -- allows professionals to explore the nature and the practice of teaching and learning.

METHOD

Participants

Twenty-one (21) teachers -- 10 elementary, 10 secondary and 1 administrator -- from three international K-13 schools participated in this study. There were 14 females and 7 males. Fourteen (14) participants reported having five or more years of teaching in international school settings. These participants were enrolled in an intensive, two-week masters' level introductory research course scheduled in the summer intersession.

Course Design and Procedure

Traditionally, this course, *Introduction to Research*, was designed to teach those skills needed for them to become consumers of research -- library skills, critical analysis and knowledge of the basics of research design. The class tasks included article summaries or abstracts and a review of the literature. Change in the emphases of the course was reflected in the revised goals: (1) to enable teachers to analyze and evaluate their teaching and students' learning; (2) to engage teachers in the active construction of knowledge through inquiry, study and collaboration; (3) to nurture in teachers a positive disposition toward collaboration, responsibility and caring in the classroom.

The transformation of the course was done through infusion of substantive information drawn from the theory and practice of teacher scholarship reflection and inquiry, and the

knowledge base of the profession. This information influenced not only content and pedagogy but also the major tasks and assignments. Each day, the group met for two, two-hour sessions. In addition, one, two-hour block was available for faculty-teacher consultation, as well as individual and/or group meeting or study. A small professional library collection and a technology laboratory with limited local and internet access were available to participants.

Course Materials

One primary research text was required for the course. This text focused on basic information related to the research process including qualitative and quantitative approaches. Additional readings related to teacher action research, critical thinking, reflection and inquiry, were provided:. Johnson, B. (1993). Teacher-as-Researcher. ERIC Digest, 92:7, 3-4.; Lytle, S. L. & Cochran-Smith, M. (1992). *Teacher Research as a Way of Knowing*. Harvard Educational Review, 62:4, 447-473; McCutcheon, G. & Jung, B. (1990). *Alternative Perspectives on Action Research*. Theory Into Practice 29:3, 144-151. Neubert, G. A. (1989). *Supporting Teacher Research*. Teacher Educator, 25:1, 2-9.; and Smyth J. (1992) *Teachers' work and the Politics of Reflection*. American Educational Research Journal 29(2), 267-300.

Dialogue and Journaling

This course provided an opportunity for the discussion of fundamental questions related to knowledge, knowing and learning. Drawing on the recommendations of Smyth (1997), the beginning dialogue required teachers, individually and collaboratively, to examine the situation in their schools and in their classrooms. Guiding prompts were used to (1) explore basic questions about knowledge, knowing, learning and teaching; (2) describe their own school experience;(3)

describe and analyze their own teaching and their students' learning; (4) evaluate the meaning of their teaching practice; and (5) determine how they could do things differently (Smyth, 1997). In addition, self questioning and elaboration strategies as proposed by Palinscar (1986) and King (1992) were modeled in order to prompt further dialogue, reflective writing, and the assessment of their teaching and to determine options for their action research plan. This initial process extended over multiple sessions.

Beyond the initial dialogues, faculty constantly modeled and highlighted uses of cognitive and metacognitive strategies, (e.g. review or rehearsal and self monitoring) and attitudes of open-mindedness and collaboration to prompt teachers to become self conscious of the positive dispositions that facilitate dialogue and reflection. The dialogue, at this point focused on valuing, prioritizing issues, negotiating and forming consensus. One additional desired outcome of this dialogue and reflection was that teachers would become aware of research as a personal and professional endeavor and as an essential part of their teaching and students' learning.

Integrating Reflection, Dialogue and Inquiry

Dialogue and the reflective process were the pathways into the assignments. Task 1 was a 3-page writing task that focused on critical analytic skills. Task 2, the proposed research, involved an interative process around considerations related to past experiences, subject matter, educational and social goals, teachers' and pupils' personalities, interest and talents and resources available. The use of reciprocal teaching and self questioning facilitated this process (Palinscar, 1986). This task was divided into three phases.

Phase 1: Knowledge and Knowing.

Teachers were required to choose a topic of study and inquiry from those generated in the dialogue. They were given the option to work individually or in groups. The dialogue extended to other strategies -- brainstorming, webbing, prioritizing. After a topic was initially explored, teachers were guided to reduce or expand the number of themes and or sub-themes to be studied. Criteria for such judgment included their level of interest and the personal and professional resources available to them. On the personal level, teachers were prompted to explore self -- their own intellectual interests, their beliefs and assumptions. On the professional content level, access was provided for teachers to explore potential resources, for example, the library and the internet. Additionally, teachers were urged to draw on their knowledge of what learners bring to the learning context through review of their most recent experiences and students' achievements.

Phase 2. Creative Designing.

This section addressed problem solving and design. Emphasis was placed on a systematic approach to data collection and analysis. The course content of this section included research approaches and methods, alternative paradigm for research design, learning activities, and assessment. Critical analysis of research articles and direct teaching were used. Scaffolding, including individual/group consultation and posters related to learning theories and research design, was used to support teachers' choices. Direct teaching was confined to thirty minute sessions.

Phase 3: Celebrating the Community or Learners

Upon completion of the research proposal, individual and teams presented their work to the group for critique. Participants also submitted a manuscript.

Data Collection Strategies

Journals: Participants were required to participate in 9 timed reflective writing sessions: three (3) were open-ended and related to defining the issue; another four (4), were focused on their perception of their academic self efficacy; and two (2) focused on their evaluation of the course.

Notes from the field and anecdotal records: Faculty recorded direct observations of what went on during all 16 formal class sessions. Anecdotal records were kept of the informal conversations with participants about their questions, observations and interactions. This was supplemented by the use of sociograms to monitor class relationships.

Audiotaped group dialogue: The first four sessions of reflective dialogue were used for modeling and for participants' practice. The next 4 sessions -- thirty minutes each -- were audiotaped.

Interviews: The Process interview protocol, designed by Calkins (1989), modified by using spiraling questioning, was conducted with participants to tease out their thinking processes, perceptions and beliefs.

Participants' proposed research plans: The proposed research plan provided information regarding participants' interest, their understanding of the research process including critical inquiry, creative thinking, effort and quality.

RESULTS AND FINDINGS

Constant comparison methods of qualitative analysis were used (Schatzman & Strauss, 1973). Each data set was analyzed separately. Participants' journals were coded and analyzed using topic analysis (Tannen, 1984). Similar analyses were done on the data from the audiotaped dialogue sessions, after they were transcribed. The topics that emerged from both sets were placed into categories and then crosstabulated to identify the major issues and challenges of the participants. A sociogram of classroom interactions was constructed from the observational data. Insights were substantiated from data gleaned from student's journals. Data from the interviews were transcribed, and analyzed using topic analysis. A teacher designed rubric was used to assess the proposed action plan.

Identifying the Issues and Challenges

Data analyses from teachers' journals and the audiotaped dialogue sessions revealed four broad overlapping categories of issues/challenges: Curriculum, Assessment, Teaching and Learning including Technology School/Parent/Community issues. Participants indicated three concerns in the Curriculum category: (1) how to include religion in their current social science curriculum; (2) designing integrated curricula with particular consideration for Fine Arts; and (3) using a constructivist approach to curriculum design in English. In the category Teaching/Learning, the issues focused on heterogeneous groupings, student failures, motivating students, ESOL, and technology.

There were two areas of concern in the School/Community category: (1) student mobility, and the influence of parental expectation and belief on students' ways of knowing and their

achievement. Teachers' dilemmas in Assessment included: management of multiple grading criteria, collaborative task design (teacher and student), group assessment and student self assessment. Content areas and grade level varied based on participants' area of interest. These categories were then returned to the group for their approval; they changed nothing.

Analysis of Social Interactions

A sociogram was constructed from the observational data; these data were matched with data from student's journals. This analysis indicated that teachers interacted by school affiliation and by grade level. However, five (5) dyads emerged and persisted over the length of the course. Those who seemed more apt to collaborate and work in dyads were female and were elementary teachers. The other 11 participants (50%) in the group who opted to work on individual concerns were males and were predominantly high school teachers and the administrator. However, the data indicated that the latter group did not abandon the dialogue process; rather, they used the group process and structure differently. They formed and reformed groups using them to test their initial as well as their developing/changing perspectives, and to seek clarification and support.

Perceptions of Academic Self Efficacy

Teachers' journal entries were analyzed to gain insights into perceptions of their self-efficacy. They indicated that the course placed them in a new learning situation that was both intellectually stimulating and intimidating. In their own voice they indicated that:

> *Laurie*: I feel overwhelmed yet stimulated and excited to explore this way of thinking. I feel that my brain is being exercised and that is exciting.
> *Harold*: I feel as if I have been starved of intellectual stimuli for so long now that I have a hard time. . . I know that I understand what you have been saying and I know that I have the intellect to make appropriate responses yet it seems to take me a long time (that is longer than a few others in the group) to process my thoughts so that I am sufficiently prepared to voice my responses with the class.

Hilda: It's a positive challenge; I have been introduced to new perspective and approaches as well as purposes for research
Zita: I know that research in Education is not as "intimidating" as I had anticipated.
Rosel: I feel overwhelmed. . . yet stimulated and excited to explore this new way of thinking
Brent:. . . . I feel I need to review what has been said in class and to self-reflect on how much of this I truly understand. I need to read more in order to understand.

In terms of their own self assessment, it offered a new perspective:

Fensa: [Class is] invigorating; it is cranking into life some long dormant parts of my brain
Donald: I don't remember the last time I was so challenged as now. The weird thing is that even though I think I don't understand anything,, I do. . . I think I have invested a lot of me into this course. I have given all I have and even though I might not understand it all. It made me think
Cora: I feel great about the course because ever since high school, I had not done a complete research [project]. This is an area that I enjoy lots as well as numbers and statistics.
Ken: It is a positive challenge because I have been introduced to a new perspective and approaches as well as the purposes for research.

However, some teachers began to question their own knowledge and abilities, became excessively self critical. They questioned their confidence in their ability to work:

Violet: I do not have a great deal of prior knowledge in this area and find the concepts difficult.
Paula: I am frustrated that I do not have the knowledge or expertise to do my project.
Umilta: The process moved too quickly for me. As a result, my anxiety level has increased to the point where I have considered giving up. I has also made me feel negative about myself in terms of my abilities as a graduate student.
Gilda: I was able to bring only a very small amount of prior knowledge to the class which has made me have open my mind.
Laurie: I am very anxious, because, this is very time consuming: TIME is such a commodity. The anxiety was related to feelings of self efficacy.
Paul: I'm moving from the periphery of understanding and maybe away from what was a lack of confidence and knowledge.
Helen: No prior knowledge in research has made it quite difficult to understand and make connections.
Ken: The task, the product : I feel I can be more critical of my theme
Donald: I know that I have to do a lot of polishing and refining.

Constraints to Reflection and Inquiry in the School setting

Participants identified time as the major constraint of their adequate performance during the course as well as during the semester; they considered reflection, inquiry and research as competing variables in the task of teaching and not part of it.

> *Harold:* The challenges of this course for me are all related to the time factor. . . I feel if I had more time to reflect on what I am learning, the quality of my work would be greatly enhanced.
> *Donald:* I understand why up until recently teachers were not the ones conducting research; many times, teachers are pressed with due dates in terms of grades, parent meetings portfolio assessment.
> *Helen:* Teacher research is not feasible in terms of time and internal research needed to pull it out. Teaching is a demanding job that takes energy to plan and it does make me question and plan.

However, some teachers indicated that the solution to their many problems resided not only in themselves but also in the context in which they were operating. They indicated that they had the support of their peers but they especially needed the support of their administration:

> *Rita*: If we want to do research, and we are the ones that should conduct this research. We should be able to communicate our valid intentions to our principals and expect to receive support and time to be able to carry out with the process
> *Fensa*: Educational research should come from teachers and schools should be able to build into their schedule, time for research as well. Only then, will we have the right to expect education to improve.

Teachers also identified other areas where support is needed: study, retooling and need for a teacher/mentor. They indicated that they recognized their role, even though a modicum of anxiety still remains:

> *Fensa*: One of the challenges has been the analytic part of the assignments; trying to read new information and making my own judgments.
> *Yanni*: I know the beginning stages of a process but along side that realize the importance of a relevant and interesting study to my active participation.

> *Umilta*: I see this process as one involving years of immersion and contemplation, I see the issue I am thinking about as meaningful to me and significant yet so overwhelming in terms of the time and resources. . . . . .
> *Brent*: My mind is racing, trying to think of all the things I have to do, and probably having questions about them and not having the "professional" answer at hand .
> *Sela*: The greatest challenge will be after this course is finished, trying to organize all these ideas . . . . . and do something about my teaching practice and my school for next year.

Participants also realized that there was a connection between the course experience and their teaching. They looked forward to continuing teaching and bringing to it the experience of reflection and inquiry. In the informal group interviews, teachers were already exploring ways to provide supports for each other to continue the reflective process, deal with the constraints and implement their studies.

Analyses of Proposed Research Plan

Participants decided on one issue for their project and generated their proposed plan. of research. The quality and appropriateness of these proposals were assessed by faculty using a rubric. Four (4) papers were rated as "Outstanding"; 9 as "Excellent"; 5 as "Very good"; 1 as "Good"; and 2 as "Satisfactory". The areas that needed most strengthening were writing and applied content knowledge.

Participants' understanding and interpretation of change

The research plans were further analyzed to determine participants' understanding and interpretation of change (as intervention or as process), and of their role in the change process. The plans were categorized according to the three alternative research paradigms as presented by McCutcheon and Jung (1990): positivist, interpretivist and critical theory. The majority of the teachers (10) framed their work using for the positivist approach; seven (7) teachers' work

demonstrated an interpretivist orientation; three (3) teachers' work indicated an orientation toward critical theory.

DISCUSSION

Any interpretation of these results and findings must be done within the limitations of this study. First, the course was completed over a two-week period; this was an intense program. Course length can be considered a moderating variable in all aspects of this study. Second, while the researcher's role as participant observer provided a comprehensive perspective and an understanding of the behaviors different from other methodological approaches, observer bias may still have been present. However, these potential limitations were counterbalanced by the triangulation of data to support the validity and reliability of the data.

The findings indicate that reflection, dialogue, and inquiry facilitated teachers' collaborative efforts towards the identification and resolution of common issues and challenges in their practice. This suggests that, with these supports, teachers at the local, national, and international levels, can work together with faculty to support their own learning and to strengthen the knowledge base of the profession. Noddings' (1991) proposal that dialogue enables the cultivation of interpersonal reasoning and the dispositions of care, solicitude, flexibility, the identification of a range of possible responses and the search for a satisfactory mode of delivery for the responses. Further, Hollingsworth (1992) outlined recommendations in support of teacher reflection-in-action, as follows: (a) provide opportunities to explore their issues and to reflect on feedback from their expressed concerns; (b) focus learning on shared concerns and (c) develop a supported critical perspective and reinforcing teaching as a process. These overall

benefits suggests that when teachers work together to focus intentionally on their learning for the improvement of teaching, students will be the beneficiaries.

Analysis of the social interactions within reflective dialogue and inquiry brought into focus issues related to collaboration, gender and teachers' work. The five (5) dyads of participants that emerged were comprised of elementary teachers who were female. The interview data indicated that these were friendship groups. Gender differences between work styles for elementary and secondary teachers have been identified in the literature: elementary teachers work in collaborative groups more than high school teachers (Hollingsworth, 1992). However, the high school teachers in this study, did not abandon the collaborative process; rather they formed and reformed groups to test their developing/changing perspectives, to seek clarification, support and confirmation. In sum, they used the collaborative process differently even when their goals were the same as those of the dyads; they relied not on friendship groups, but on peer groups. These findings extend prior knowledge and offer another dimension to teachers' collaborative work.

Teachers' research focus and research design were selected from a number of alternatives. Their choice of single design approach reflects their initial understanding and interpretation of change as intervention or as process, and of their role in the change process. In addition, the findings relative to the participants' negative perceptions of academic self efficacy are of significance. Pintrich, Marx and Boyle (1993), in the conceptual change literature, identified disequilibrium as one of the conditions for learning and creativity. Further, the research literature related to learning in the zone of proximal development as presented by Vygotsky (1978)

acknowledge similar phenomena. This literature suggests that this is a primary condition of conceptual change.

There are several implications for research and practice that can help to advance teachers' cultivation of dispositions to change practice. In the area of research, there is a need for:

- further investigation into the cultivation of interpersonal reasoning through continuing reflection and dialogue among teachers.
- additional documentation and analysis of the collaborative work of faculty and experienced teachers during the research implementation process. The goal here is not only to monitor the quality of the work being done, but also to monitor personal change and change in students
- research in conceptual change in adult learning. To date, examination of teacher development has not been conceptualized using the research literature related to adult learning. This has potential for work done with experienced teachers.
- change in programming for professional development programs focusing on research/inquiry . Team teaching -- across content areas, assessment and the philosophies of curriculum, teaching and learning -- can enhance the process of learning for experienced teachers.
- faculty to work closely with school district personnel to address persistent constraints that teachers face associated with continuing reflection and collaborative inquiry. The Holmes Group (1990) recommended change in time allocation, reward system and resources as an essential ingredient in support of teacher professionalism and change in schools.

REFERENCES

Calkins, L. (1986). Forming research communities among naturalistic researchers. In Perspectives on Research and Scholarship in composition, eds. Ben McClelland and T. Donovan. New York: Modern Languages Association.

Corsaro, W. (1981). entering the child's world: Research strategies for field entry and data collection in a preschool setting. In Ethnography and Language in Educational Settings, eds. J. Green and C. Wallach, Norwood, New Jersey: Ablex Publishing.

Dewey, J. (1944). Democracy and Education. Toronto, Ontario: Collier-Macmillan.

Eby, J. & Kujawa, E. (1994). Reflective Planning, Teaching and Evaluation: K-12. New York: Merrill.

Freire, Paulo (1972). Pedagogy of the Oppressed. London: Penguin.

Freire, P. (1990). Education for Critical Consciousness. New York: Continuum.

Goodman, J.(1986). Teaching preservice teachers a critical approach to curriculum design: A descriptive account. Curriculum Inquiry, 16:2, 109-125.

Grimmett, P. & Erikson, G (Eds). (1988). Reflection in teacher education. New York: Teachers College Press.

Hollingsworth, S. (1992). Learning to Teach through Collaborative Conversation: A Feminist Approach. American Educational Research Journal 29(2) 373-404

The Holmes Group (1990). Tomorrow's schools: Principles for the design of professional development schools. East Lansing, MI: Author.

King, A. (1992). Facilitating Elaborate Learning through guided student-generated Questioning. Educational Psychologist, 27:1, 111-126.

Liberman, A. (Ed.).(1992). The Meaning of Scholarly Activity and the building of Community. Educational Researcher, 21:6, 5-12

McCucheon, G. & Jung, B. (1990) Alternative Perspectives on Action Research. Theory into Practice, 29:3, 144-151.

McLaren (1989). Life in Schools: An Introduction to Critical Pedagogy in the Foundations of Education. London: Longman.

Noddings, N. (1991). Stories in Dialogue: Caring and Interpersonal Reasoning. In Stories Lives Tell, Ed. C. Witherell & N. Noddings (1991) New York: Teachers College Press.

Oja, S. N. & Pine, G. J. (1988). Collaborative Action Research: Teachers' stages of development and school contexts. Peabody Journal of Education, 64(2), 96-115.

Palinscar, A. (1986). The role of dialogue in providing scaffolded instruction. Educational Psychologist, 21:1, 73-98.

Pintrich, P. R. & Marx, R. W. & Boyle, R. A. (1993). Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in the Process of Conceptual Change. Review of Educational Research, 63:2, 167-199.

Schon, D. A. (1983). The reflective practitioner. New York: Basic Books.

Schon, D. A. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Schatzman, L. & Strauss, A. (1973). Field Research, Englewood, Cliffs, New Jersey: Prentice-Hall.

Smyth J. (1992). Teachers' work and the Politics of Reflection. American Educational Research Journal 29(2), 267-300.

Stevenson, R. B. (1991). Action research as professional development: A U.S. case study of inquiry-oriented inservice education. Journal of Education for Teaching, 17(3), 277-292.

Tannen, D. (1984). Conversational style: Analyzing talk among friends. Norwood, New Jersey: Ablex Publishing

Van, Manen, M. (1977). Linking ways of knowing with ways of being practical. Curriculum Inquiry, 6:3, 205-228.

Vella, J. (1994). Learning to Listen, Learning to Teach: The power of dialogue in Educating Adults. San Francisco: Jossey-Bass, Inc.

Vygotsky, L. S. (1978). Mind in society: The Development to higher psychological processes. (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Trans, & Ed.). Cambridge, MA: Harvard University Press.